KELLOGG, HUBER, HANSEN, TODD & EVANS, P.L.L.C.
SUMNER SQUARE
1615 M STREET, N.W.
SUITE 400
WASHINGTON, D.C. 20036-3209
(202) 326-7900
FACSIMILE:
(202) 326-7999

MICHAEL K. KELLOGG
PETER W. HUBER
MARK C. HANSEN
K. CHRIS TODD
MARK L. EVANS
STEVEN F. BENZ
NEIL M. GORSUCH
GEOFFREY M. KLINEBERG
REID M. FIGEL
HENK BRANDS

SEAN A. LEV
EVAN T. LEO
ANTONIA M. APPS
MICHAEL J. GUZMAN
AARON M. PANNER
DAVID E. ROSS
SILVIJA A. STRIKIS
WILLIAM J. CONYNGHAM
RICHARD H. STERN, OF COUNSEL
SHANLON WU, OF COUNSEL

November 19, 2001

VIA ELECTRONIC FILING AND HAND DELIVERY **EX PARTE**

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Ex Parte Communication in ET Docket No. 98-206; RM-9147; RM-9245; Applications of Broadwave USA et al., PDC Broadband Corporation, and Satellite Receivers, Ltd., to provide a fixed service in the 12.2-12.7 GHz Band; Requests of Broadwave USA et al. (DA 99-494), PDC Broadband Corporation (DA 00-1841), and Satellite Receivers, Ltd. (DA 00-2134) for Waiver of Part 101 Rules.

Dear Ms. Salas:

On November 16, 2001, Sophia Collier and Antoinette Cook Bush of Northpoint Technology, Ltd. ("Northpoint") met with the following officials in the International Bureau ("IB"): Donald Abelson, Bureau Chief; Anna Gomez, Deputy Chief; Paul Locke, Engineer; and Rosalee Chiara, Special Advisor.

Also on November 16, 2001, the same Northpoint representatives met with the following officials in the Office of Engineering and Technology ("OET"): Bruce Franca, Acting Office Chief; and James Burtle, Chief of the Experimental Licensing Branch of the Electromagnetic Compatibility Division.

At both meetings, Northpoint discussed various technical issues relating to terrestrial/satellite sharing of the 12.2-12.7 GHz frequency band. The attached presentation was given at both meetings and summarizes the substance of the points Northpoint made.

In addition, at the meeting with IB officials, Northpoint pointed out that it is the only applicant to have made any showing that it is capable of sharing the 12.2-12.7 GHz frequency band with planned NGSO FSS operations.

At the meeting with both the IB and OET officials, Northpoint discussed the definition of the term "mitigation zone" and reiterated that few, if any, DBS subscribers in such a zone will require on-site mitigation. In fact, in the three Northpoint experimental tests, no DBS subscribers needed on-site mitigation and there were no complaints of interference from any DBS subscribers. In addition to natural shielding, Northpoint utilized many techniques available to terrestrial systems that do not require visiting any DBS subscriber's home – including careful transmitter placement, power control, and beam tiling – successfully to avoid harmful interference with DBS signals. Not even in the DBS industry's own tests of Northpoint's technology was there even a single instance of harmful interference to any DBS subscriber. No on-site mitigation was ever needed.

This letter will be filed electronically in ET Docket 98-206, RM-9147, and RM-9245. In addition, twelve copies of this letter will be filed in paper form – two for inclusion in each of the above-referenced application files. Please contact me if you have any questions.

Yours sincerely,

J. C. Rozendaal

J. C. Rozendaal
Counsel for Northpoint Technology, Ltd.

attachment

cc: meeting participants

MDS Experimental Report Does Not Support MDS Claims

- Northpoint has sued MDS for patent infringement, yet it is essential for the Commission to realize that MDS' imitation is highly flawed – the MDS experimental report does not put any information in the record to support the MDS claim that it is capable of sharing with DBS.
- MDS did not document transmission or reception of video, data or any coherent signal.
- MDS did not provide any quantitative assessment of its impact on DBS
  - The critical factors MDS omitted:
    - Equivalent power flux density ("e.p.f.d.") of its signal
    - Actual carrier-to-interference ratio ("C/I")
    - Estimate of the increase in unavailability of DBS reception
  - Without these measurements MDS claims of compatibility with DBS are unsupported.

Flawed MDS Test Methodology
Invalidated Data Submitted in MDS Report

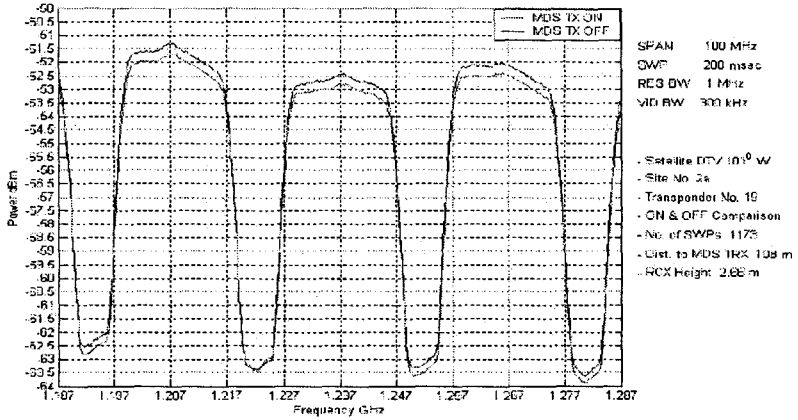


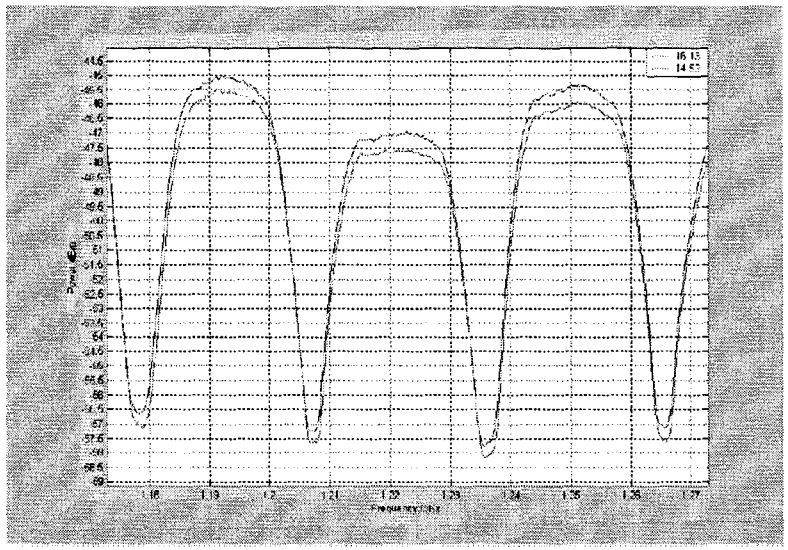
Figure 35 Site 2a DTV101 RC ON & OFF Comparison plot

Figure 35 from MDS report depicts bias – Indicative of measurement error.

- MDS documented an "almost constant bias" in its data.
- MDS attempted to attribute this bias to "changes in weather" that it claimed were correlated with the times it turned its transmitter on and off.
- The bias is larger than any interference criteria considered by Commission.
- Presence of this bias invalidates report as it is impossible to identify if the measurements show interference or measurement bias.

New MDS Submissions
Further Document Un-quantified Bias

- Recent filings from MDS confirm that MDS allowed atmospheric affects to pollute its test data.
- MDS report must be disregarded.



November 7 ex-parte slide shows Washington area readings depicting similar variances as MDS recorded in Florida.

Demonstrates that MDS report data is invalid.

MDS Contradictory Statements Regarding Mitigation

- In recent Ex Parte, MDS claims that its technology needs no on-site mitigation. Through the MDS technology:

  "DBS customers [equipment] need not be altered in any way to accommodate MVDDS." (MDS, Nov 8, 2001 Ex Parte)

- MDS Oct 17 Report:

  "Based on the analysis of the collected data, the MDS transmitter can very well co-exist with the DBS signal in this type of environment with a limited mitigation zone. The mitigation zone can be as small as 100 m around the transmitter."

- MDS never defined what it meant by a "mitigation zone" but presumably it is an area which requires additional mitigation beyond that which is supplied by the MDS equipment.

Pegasus's Proposals Would Hinder, Rather Than Promote, Terrestrial Deployment

- Pegasus multi-tiered proposals:
  - A limit on the carrier to interference ratio (C/I ratio), and:
  - A limit on the terrestrial transmitter EIRP, plus:
  - A limit on the PFD value at any DBS receiver to -181.5 dBw/M2/MHz, in combination with:
  - A limit on the transmitting antenna azimuth.
- Northpoint: C/I (or EPFD) limit defines acceptable level of interference.
- It cannot possibly matter what the transmitting antenna azimuth or EIRP might be, if the EPFD limit is met.

Pegasus Proposals Would Prevent Deployment of MVDDS

- Pegasus proposes to limit the transmitting e.i.r.p to -17.5 dBW per 500 MHz:
  - Reduction by 13 dB of typical transmitter
  - Reduces transmit radius by factor of 10,
  - Reduces area served by factor of 100
- Pegasus proposes additional limit on PFD of –181.5 dBW per 1 MHz
  - Result is C/I protection ratio of 90 dB
- Pegasus proposes additional limit on "transmit azimuth" of terrestrial system
  - Would limit transmit azimuth to less than $1/6^{th}$ of compass
- Proposals must be considered anti-competitive.

Math: Pegasus PFD Proposal Equates to C/I of 90 dB

PFD = -181.5 dBW/m^2 in a 1 MHz bandwidth

Conversion to 24 MHz bandwidth: 10*Log(24)	= 13 dB
Allowance for 1 m^2 antenna	= -43.3 dB
Antenna gain towards interferer (worst case)	= 0 dB
Resulting interference power	= -211 dB
Carrier power	= -120 dBW
C/I	= 90 dB

CERTIFICATE OF SERVICE

I, Shonn Dyer, hereby certify that on this 19th day of November, 2001, copies of the foregoing, were served by hand delivery* and/or first class United States mail, postage prepaid, on the following:

Magalie Roman Salas*
Secretary
Federal Communications Commission
445 12th Street, SW
Room TW-B204
Washington, D.C. 20554

Donald Abelson, Bureau Chief
Anna Gomez, Deputy Chief
Paul Locke, Engineer
Rosalee Chiara, Special Advisor
International Bureau*
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Bruce Franca, Acting Office Chief
James Burtle, Chief of the Experimental Licensing Branch of the Electromagnetic Compatibility Division
Office of Engineering and Technology*
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Antoinette Cook Bush
Northpoint Technology, Ltd.
444 North Capitol Street, N.W.
Suite 645
Washington, D.C. 20001

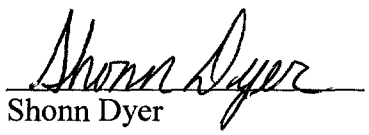
Tony Lin
David C. Oxenford
Shaw Pittman
2300 N. Street, NW
Washington, D.C. 20037

Nathaniel J. Hardy
Irwin, Campbell & Tannewald, PC
1730 Rhode Island Avenue, NW
Suite 200
Washington, D.C. 20036

James H. Barker, III
Latham & Watkins
1001 Pennsylvania Ave., NW
Suite 1300
Washington, D.C. 20004-2505

Pantelis Michalopoulos
Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, D.C. 20036

Nancy K. Spooner
Swidler Berlin Shereff Friedman, LLP
The Washington Harbor
3000 K Street N.W., Suite 300
Washington, D.C. 20007-5116



Shonn Dyer